

tion in the main trunk, and no previous enlargement of the collateral channels; none of that preparation which was formerly considered so essential to the successful issue of an operation. In the present case the circulation was so far re-established in two hours and a half after the operation, that the pulse could be distinctly felt at the wrist.

This latter circumstance is interesting, in connexion with the fact that there was no increased temperature in the limb after the operation. In the generality of cases, in proportion as the collateral circulation is re-established, there is an increase of temperature beyond that of the healthy limb, which increase gradually subsides as the circulation is restored in the larger vessels. In the present case the patient always complained of a sense of coldness and numbness in the limb, and frequently applied for flannel to wrap the hand and arm in, although the circulation was quite strong in both radial and ulnar arteries. There cannot, I conceive, be any doubt that this continued coldness was connected with the diseased state of the median nerve."—*London Medical Gazette*, July 11, 1835.

40. *Case of Crural Aneurism—Ligature of the external Iliac Artery—Cure.*—A case of crural aneurism, cured by ligature of the external iliac artery is recorded in the *London Medical Gazette*, (Jan. 30, 1836.) The subject of the case, was a footman 24 years of age, of a plethoric habit, muscular frame and unusually fat for his time of life. Whilst carrying a heavy load, his foot slipped and he was compelled to use considerable muscular effort to prevent his falling. Some time after this he perceived a small swelling in his right groin. Seven months afterwards, when admitted into the Sussex County Hospital, the tumour was the size of a hen's egg, situated an inch below Poupart's ligament, in the course of the crural artery, possessing very active pulsation: when firmly pressed upon, it could be partially emptied of its contents, but regained its original magnitude upon the pressure being removed. The circumference of the upper part of the thigh was four inches greater than that of the sound one, the limb below being increased in proportion. The integuments were of the natural colour; it was unattended with pain or inconvenience in walking; his general health was good, the heart's action regular, and the patient was wholly unconscious of labouring under a disease of importance. He was ordered spare diet, with purging and bleeding at intervals, as a preparatory measure, for three weeks, when he was considered to be in a favourable state for operation.

The operation of tying the external iliac artery was performed by Mr. TAYLER, in the following manner:—

The patient being placed in the usual position, an incision, four inches in length, was then directed, more in the course of Poupart's ligament than is usually recommended. This was found greatly to facilitate the after-steps of the operation, from the increased space afforded by the more transverse division of the abdominal parietes. The peritoneum and intestines being held back by an assistant, the ligature was passed from within outwards, the sheath having been previously opened by cautiously scratching with the ivory handle of the knife. The ligature was a single strong cord of unbleached silk. Upon tightening it, the pulsation immediately ceased. The wound was brought together with adhesive plaster, and the patient ordered an anodyne draught. He complained of numbness in the foot for several days, but there was no difference at any time in the temperature of the limbs indicated by the thermometer. It is unnecessary to give a daily report of the case. The ligature came away on the sixteenth day; from which time he progressively improved, and was discharged August the 12th. The patient remained in the hospital until he was sufficiently recovered to resume his usual occupation, the tumour having almost disappeared. I have lately heard of him; the report was, he had never been in better health; the right limb quite as strong as ever.

41. *On the Treatment of Hydrocele by Setons.*—By Mr. GREEN. Thomas Waterman, ætat 40, weaver, admitted into Isaac's ward, October 25, 1832. A healthy man, of regular habits: is the subject of hydrocele on the right side, which commenced, without any assignable cause, about five or six years since, and has gradually increased in size, but unaccompanied with pain.

Nov. 2nd, 1 p. m.—The operation was performed as follows:—A trocar and

canula having been introduced, about eight ounces of fluid were drawn off, and during this time the man fainted. The canula still remaining in, a needle six inches in length and as thick as a probe, with a trocar point at one and an eye at the other end, was introduced, armed with twelve threads of ordinary seton silk, into the canula, and having been carried upwards, perforated the tunica vaginalis and integuments near the upper and fore part of the swelling, and was drawn out by that aperture. The canula was then removed, and the ends of the thread tied loosely together over a space of about two inches. After he recovered from the faintness he was sent to bed, complaining of great pain extending up the cord to the loins.

10 p. m.—The pain had become so severe, that the threads were removed, and he soon began to experience relief.

3d.—Has had a restless night; the pain still continues, but is not so severe. His bowels being costive, mist. senn. comp. was ordered.

4th.—Slept better last night, the pain having subsided during the course of the evening; bowels open; complains of thirst; pulse soft and quick; has no appetite. There is slight heat and redness of the scrotum.

5th.—The swelling of the scrotum increasing, but the heat much diminished.

6th.—The scrotum is now as large as it was prior to the operation.

9th.—Much the same.

26th.—Since the last report the swelling has somewhat increased in size, but in other respects he was quite well.

Dec. 7th.—Fluctuation being now apparent, though there is no transparency in the tumour, the hydrocele was tapped a second time, and about six ounces of very dark-coloured fluid evacuated; this high colour, together with the great thickening of its coverings, which has occurred since the last operation, has been probably the cause of the opacity of the swelling. Threads were then introduced as before, and the patient sent to bed.

8th.—Has slept four or five hours during the night. There is considerable redness, but not much heat, about the scrotum this morning; has pain extending along the cord when pressed; the lower part of the scrotum very tender, and he complains of pain in the loins. Pulse quick and soft; skin moist.

1 p. m.—The threads were withdrawn after *twenty-two* hours.

9th.—Passed a rather restless night. The swelling a little increased, accompanied with redness; much heat and pain upon pressure.

11th.—He has slept well; bowels open; pulse regular and quiet. The swelling much the same, but the redness rather less, and he feels himself easy.

Jan. 5th, 1833.—The swelling much diminished. Adhesion has taken place at the lower, though there is still some fluid at the upper part.

Feb. 5th.—Was discharged. For some time previous to his leaving the house, he rubbed ung. iodine on the scrotum, which certainly caused partial absorption of the remaining fluid.

* * * * *

The foregoing cases are intended as illustrations of a plan of treatment, which, although not altogether novel, may, perhaps, be deemed an improved method of effecting the radical cure of a hydrocele.

The object of the radical cure is that of causing such a change in the tunica vaginalis as will prevent the re-accumulation or re-production of the fluid. I use the term "change" advisedly; for though it is generally stated that the object in a radical cure is to obliterate the cavity of the tunica vaginalis, by causing adhesion of the sides of that membrane, a preparation in the collection of this hospital exhibits a tunic, taken from a person in whom the radical cure was effected by injection, and in whom, after this operation, no fluid was re-produced, with the cavity as perfect as it might be in the healthiest person. Here the change must have been produced by some alteration of the surface; and I can very well conceive that a slight inflammatory action may take place, so as to close the exhalant arteries, and to prevent them afterwards from pouring their secretion into the cavity, or, at any rate, so as to close a sufficient number of them to prevent any redundancy of the secretion. I very strongly suspect that in many instances of the radical cure of hydrocele no more has been done than you see in this preparation; and, indeed, I think you will agree with me, that if we could always hit the production of that quantity of inflammation which should produce

this, and no more, it would be a better plan of treating the complaint than that of causing the obliteration of the cavity. But unfortunately, under all the plans of treatment hitherto adopted, the quantity of inflammation cannot be regulated; unless, indeed, in the cases above cited, a method is offered which may, in some measure, supply the defect, and aid us in adjusting the requisite degree of inflammatory action.

* * * * *

Now, generalizing these facts, the results of the above and other cases, I may venture, perhaps, to say that the plan of treatment is well adapted to answer the end for which it was intended. In two instances, indeed, the operation failed from the want of a sufficient degree of inflammation, but which simply depended upon the insufficient irritation of the seton threads.

In another case there was a slight suppuration of the cellular membrane of the scrotum, which, however, only interfered with the rapidity of the cure, but was in no other way detrimental to the patient. In another case, however, there was excessive inflammation and a suppurative process in the tunica vaginalis; and the possibility or probability of this occurrence is perhaps the most serious objection to the operation proposed which may be gathered from these cases. It might, indeed, raise in the mind a doubt on the principle itself of the operation. You introduce an extraneous body into the tunic, and you allow it to remain till inflammation is produced, and it is possible that the inflammatory action excited by extraneous bodies may tend to the suppurative instead of the adhesive form of inflammation. As, however, this result was only observed in one case, and as no such disposition was manifested in a number of cases, of which the success was perfect, we are perhaps warranted in drawing a conclusion generally in favour of the effects of the seton. Of course future cases (and as I shall continue to adopt the same plan of treatment such will not be wanting) will decide the point; but otherwise, in respect of having a mode of treatment enabling us to regulate the degree of inflammation, the plan here offered presents great advantages.

I should state that the requisite degree of inflammation is one which is attended with the ordinary symptoms of that process; that is to say, pain, heat, swelling, some redness, and some constitutional affection. There should be, I think, some affection of the pulse, some indication of febrile action in the system, before the seton is withdrawn. As soon as this has been observed, the threads may be removed, and I believe that you may then expect that you have excited inflammation enough to cure the disease. So that it is not whether the seton has remained in ten, twelve, or twenty hours, for this must be regulated by circumstances, but it is whether the requisite degree of inflammation is produced. I should say that twenty hours was about the average time for the seton to remain; but it will vary in different instances.

I might likewise observe that this plan of exciting inflammation by a seton will answer your purpose in various other cases. Ganglions, which you cannot get rid of by bursting them under the skin, or by puncturing them with a surgical needle, and which it would be dangerous to remove, also enlarged bursæ, may be treated by a seton in the same way. Inflammation being excited, and the surfaces of these cysts brought into contact, you obtain adhesion and cure the disease;—I have done it repeatedly. I might speak of its efficacy too in that case which by some has been called hydrocele, or dropsy of the thyroid gland. I was consulted respecting a large swelling in the neck of a lady, which was evidently situated in the thyroid gland. I found that she had had a great deal of surgical advice, and that many plans had been adopted but without success; I had no inducement, therefore, to go through the same routine of remedies. On making an accurate examination, it appeared to me quite clear that there was a cyst containing fluid; and considering it a fit case for the use of the seton, I introduced a canula, by means of a trocar, for the discharge of the fluid. I then carried a seton through the cyst, and allowed it to remain till what I considered a requisite degree of inflammation had been produced. The result shortly was, that she became completely cured, and remains well to this day. So that this is a plan of treatment which may be adopted in cases similar to hydrocele, where you wish to excite adhesive inflammation, and where you wish to have some mode of regulating the degree of inflammation required.—*St. Thomas' Hospital Reports*, No. I. Nov. 1833.